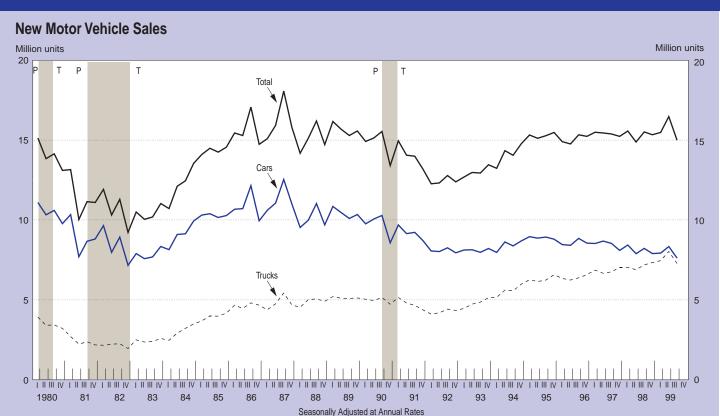
Motor Vehicles, 1999

By Ralph W. Morris

States of new motor vehicles in the United States totaled 17.4 million units in 1999 (chart 1 and table 1). This level of sales was the highest on record; the previous high was 16.3 million units in 1986. Sales increased 9.1 percent—nearly 1.5 million units—in 1999 after increasing 3.0 percent in 1998. The sharp acceleration was accounted for by sales of both cars and trucks.

The strength in motor vehicle sales in 1999 reflected developments in a number of factors—those related to general economic conditions and those that were industry specific. Real gross domestic product (gdp) increased 4.0 percent in 1999; this rate was above the 3.6-percent average annual growth rate for real gdp over the current expansion, which began in the second quarter of 1991. Many of the measures that are usually considered in analyses of consumer spending strengthened in 1999. The unemployment rate decreased for the seventh consecutive year, moving down from 4.5 percent in 1998 to 4.2 percent—the lowest rate in nearly 30 years.

CHART 1



Note—Peak (P) indicates the end of business cycle expansion and the beginning of recession (shaded area). Trough (T) indicates the end of business cycle recession and the beginning of expansion. Business cycle peaks and troughs designated by the National Bureau of Economic Research, Inc.

Data: American Automobile Manufacturers Association, Inc. and Ward's Automotive Reports, seasonally adjusted by BEA.

U.S. Department of Commerce, Bureau of Economic Analysis

^{1.} Sales of motor vehicles are sales of new cars and trucks. The data on unit sales, inventories, and production in this article are mainly from Ward's Automotive Reports and the American Automobile Manufacturers Association, Inc., and the data on prices are mainly from the Bureau of Economic Analysis (Bea). These data underlie the estimates of motor vehicle output in the national income and product accounts. The quarterly data for domestic and imported cars and light trucks are seasonally adjusted by Bea using seasonal factors from the Federal Reserve Board.

Real disposable personal income (DPI) increased 4.0 percent in 1999; this rate was above the 3.0percent average growth rate for real DPI over the current expansion. The Index of Consumer Sentiment (a measure of consumer attitudes and expectations prepared by the University of Michigan's Survey Research Center) increased to its highest level in 40 years. In addition, consumer spending may have been stimulated in recent years by the considerable additions in household wealth that have resulted from rising equity prices and from gains in real estate values.

Several factors specific to the motor vehicle industry also helped to boost sales. First, manufacturers offered sales-incentive programs to consumers throughout the year. These incentives included rebates, below-market-rate financing, and discount packages on options on selected models. Second, the consumer price index (CPI) for new cars decreased 1.2 percent in 1999 after decreasing 0.9 percent in 1998, and the CPI for new trucks increased only 0.9 percent after decreasing 0.4 percent.² These price changes reflected both the extensive sales-incentive programs and ongoing efforts by manufacturers to hold down production costs. Third, finance terms on new-vehicle loans remained favorable in 1999. Interest rates on new-car loans made by commercial banks averaged 8.4 percent, down from 8.8 percent in 1998, and rates on new-car loans made by motor vehicle finance companies averaged 6.7 percent, up from 6.3 percent (chart 2). (The rates at motor vehicle finance companies may partly reflect manufacturers' sales-incentive programs.) In addition, the average length to maturity of new-car loans made by the finance companies increased to 52.7 months from 52.1 months. (Longer term loans tend to increase sales to marginal buyers because monthly payments are reduced.)

The combined sales of cars and light trucks increased to 16.8 million units in 1999; sales were 12.5 million units in 1991, the year the current expansion began (chart 3).3 Sales increased 8.6 percent in 1999 after increasing 2.5 percent in 1998; sales of both cars and light trucks contributed to the 1999 increase. The combined sales of domestic cars and light domestic trucks increased 6.5 percent after increasing 2.2 percent.4 The combined sales of imported cars and light imported trucks increased 22.6 percent after increasing 4.5 percent; their share of total car and

Table 1.—Selected Motor Vehicle Indicators

| | | | | | | | | | Se; | Seasonally adjusted at annual rates | | | | |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|
| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 1998 | 1999 | | | | |
| | | | | | | | | | IV | ı | II | III | IV | |
| | Thousands of units | | | | | | | | | | | | | |
| New motor vehicle sales | 13,118 | 14,199 | 15,413 | 15,118 | 15,456 | 15,498 | 15,963 | 17,414 | 16,549 | 16,877 | 17,365 | 17,816 | 17,570 | |
| New-car sales Domestic Import | 8,214 6,277 1,938 | 8,518 6,734 1,784 | 8,990 7,255 1,735 | 8,636 7,129 1,507 | 8,527 7,254 1,273 | 8,273 6,906 1,366 | 8,142 6,764 1,378 | 8,697 6,982 1,715 | 8,293 6,885 1,408 | 8,401 6,889 1,512 | 8,773 7,078 1,695 | 8,813 7,102 1,711 | 8,793 6,835 1,957 | |
| New-truck sales Light Domestic Import Other | 4,903 4,629 4,233 396 275 | 5,681 5,346 4,981 365 336 | 6,422 6,034 5,638 396 388 | 6,481 6,053 5,663 391 428 | 6,929 6,519 6,088 431 411 | 7,226 6,797 6,226 571 429 | 7,821 7,297 6,651 646 524 | 8,717 8,072 7,310 763 645 | 8,256 7,663 6,941 721 593 | 8,476 7,847 7,100 747 629 | 8,592 7,970 7,246 724 622 | 9,003 8,348 7,608 740 655 | 8,777 8,099 7,254 846 678 | |
| Domestic-car production | 5,666 | 5,979 | 6,614 | 6,350 | 6,080 | 5,927 | 5,547 | 5,641 | 5,813 | 5,599 | 5,451 | 5,854 | 5,658 | |
| Domestic-car inventories ¹ Domestic-car inventory-sales ratio ² | | | | | | | | | 1,288 2.25 | 1,303 2.27 | 1,214 2.06 | 1,251 2.11 | 1,291 2.27 | |
| | Dollars | | | | | | | | | | | | | |
| Average expenditure per new car ³ Domestic Import | 16,336 15,644 18,593 | 16,871 15,976 20,261 | 17,903 16,930 21,989 | 17,959 16,864 23,202 | 18,777 17,468 26,205 | 19,551 17,838 28,193 | 20,849 18,579 31,986 | 21,022 18,725 30,350 | 21,257 18,885 32,849 | 20,720 18,609 30,339 | 20,898 18,648 30,291 | 21,049 18,855 30,154 | 21,420 18,787 30,617 | |

^{1.} End of guarter, not at annual rate

^{2.} The Bureau of Labor Statistics (BLS) calculates the CPI. Effective with the release of the January 1999 data, the CPI for new cars and for new trucks is no longer adjusted for changes in vehicles that are made in response to air pollution mandates. For an explanation of this change in treatment and the implications for the CPI, see "The Treatment of Mandated Pollution Control Measures in the CPI" on the BLS Internet site at <www.bls.gov/cpiheoo.htm> or contact the BLS.

^{3.} Light trucks have a gross vehicle weight of up to 10,000 pounds; these trucks include light conventional pickups, compact pickups, sport-utility vehicles, and passenger vans.

^{4.} Sales of domestic vehicles consist of the sales in the United States of vehicles manufactured in North America—that is, in Canada, the United States, and Mexico. Sales of imported vehicles consist of vehicles manufactured outside North America and sold in the United States.

End of quarter, not at annual rate.
 Ratio of end-of-quarter inventories to average monthly sales for the quarter.
 BEA estimate, using average base price and adjustments for options, transportation charges, taxes, discounts, and rebates for each model, weighted by that model's share of sales; not at annual rate.

Source: American Automobile Manufacturers Association, Inc., and Ward's Automotive Reports; data are seasonally adjusted by BEA

light-truck sales increased to 14.8 percent from 13.1 percent.

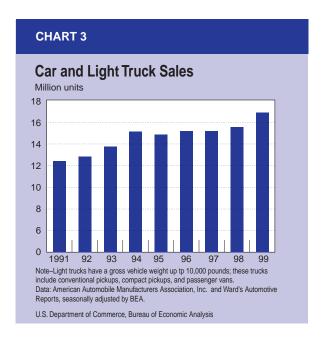
New Cars

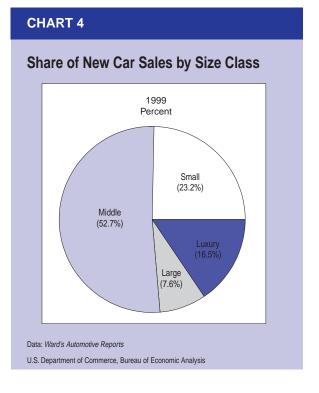
Sales of new cars increased 6.8 percent to 8.7 million units in 1999 after decreasing 1.6 percent in 1998. Sales of domestic cars and of imported cars both contributed to the turnaround. Sales of domestic cars increased 3.1 percent to 7.0 million units; sales decreased in each of the preceding 2 years. Sales of imported cars increased 24.7 percent after increasing 0.8 percent; sales of cars imported from Germany and from the Republic

CHART 2 Finance Terms on 48-Month **New Car Installment Loans** Percent INTEREST RATES 10 8 Commercial Banks Auto Finance Companies AVERAGE LENGTH TO MATURITY 54 52 Auto Finance Companies Percent 95 LOAN-TO-VALUE RATIO 93 91 Auto Finance Companies 1994 1995 1996 1997 1998 1999 1. Most common interest rates (annual percentage rate) at reporting institutions. U.S. Department of Commerce, Bureau of Economic Analysis

of Korea increased strongly. In 1999, sales of cars imported from Japan increased; the increase interrupted a decade-long trend of decreases.

Sales of small cars remained at 2.0 million units, and their share of total car sales decreased to 23.2 percent from 24.7 percent (chart 4). Sales of middle-sized cars increased to 4.6 million, and their market share increased to 52.7 percent from 51.1 percent. Sales of large cars remained at 0.7 million, and their market share decreased to 7.6 percent from 8.2 percent. Sales of luxury cars





increased to 1.4 million, and their market share increased to 16.5 percent from 16.0 percent.

The average expenditure per new car increased 0.8 percent to \$21,022 in 1999.⁵ The increase partly reflected the shift in the market toward imported cars, which have a higher average expenditure than domestic cars. Even so, the average expenditure per new car for imported cars decreased 5.1 percent to \$30,350 in 1999; the decrease was partly attributable to a shift in the composition of imported-car sales from luxury cars to small cars and middle-sized cars. For domestic cars, the average expenditure per new car increased 0.8 percent to \$18,725; the modest increase partly reflected increased sales of models equipped with extra features such as keyless remote entry, compact disk players, and side air bags.

Domestic-car production—that is, cars made in the United States—increased to 5.6 million units in 1999 after 4 consecutive years of decline.

Domestic-car inventories were 1.3 million units at the end of 1999, the same as at the end of 1998. The inventory-sales ratio was 2.3 at the end of 1999; the traditional industry target is 2.4.

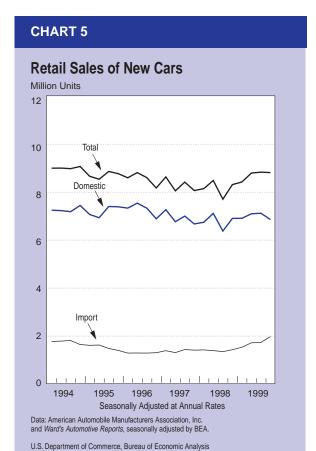
Data Availability

BEA prepares seasonally adjusted estimates of auto and truck unit sales, of auto unit production and inventory change, and of average expenditure per new car. These estimates are available online by subscribing to STAT-USA/Internet, a service of the U.S. Department of Commerce; for more information, visit STAT-USA'S Web site at <www.stat-usa.gov> or call 1-800-STAT-USA OF 202-482-1986.

These estimates are also available monthly in printout or on diskette by monthly subscription from BEA, as follows:

- "Auto Output Printout Subscription"—product number NLS-0167, price \$108.00; or
- As part of the "NIPA Monthly Update Diskette Subscription"—product number NDS-0171, price \$204.00.

To order, call the BEA Order Desk at 1-800-704-0415 (from outside the United States, call 202-606-9666).



By quarter, new-car sales increased in the first, second, and third quarters of 1999 and decreased in the fourth (chart 5).

New Trucks

Sales of new trucks increased 11.4 percent to a record 8.7 million units in 1999 after increasing 8.2 percent in 1998. Sales of light domestic trucks, light imported trucks, and "other" trucks all increased.⁶

Sales of light trucks—that is, light domestic trucks and light imported trucks—increased 10.6 percent after increasing 7.4 percent. The 1999 increase was mostly accounted for by sport-utility vehicles, but sales of pickups and vans also contributed. In recent years, the composition of truck sales has shifted toward "upscale" models, which offer more power, luxury, and options than basic models.

Sales of light domestic trucks increased 9.9 percent to 7.3 million units after increasing 6.8 percent to 6.7 million units.

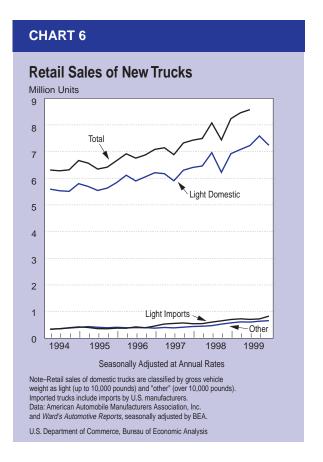
Sales of imported light trucks increased 18.1 percent to 0.8 million units, and their share of

^{5.} BEA derives the average expenditure per new car by using data mainly from the Automotive Invoice Service and BLS; the measure consists of the average base price and adjustments for options, transportation charges, taxes, discounts, and rebates for each model, weighted by that model's share of sales. Movements in the average expenditure differ from movements in the new-car component of the CPI for at least two reasons: First, the average expenditure, unlike the CPI, reflects changes in the mix of models and options sold and includes cars sold to businesses and to governments, as well as cars sold to consumers; and second, because the CPI, unlike the average expenditure, is adjusted to remove the influence of quality change on prices.

^{6. &}quot;Other" trucks have a gross vehicle weight of over 10,000 pounds; these trucks range from medium-duty general delivery trucks to heavy-duty diesel tractor trailers. Nearly all of these trucks are purchased by businesses.

total light-truck sales increased to 9.5 percent. The increase in sales of imported light trucks was largely accounted for by sport-utility vehicles, mainly those vehicles imported from Japan and Korea. In recent years, sales of these vehicles may have been boosted by the introduction of several new models into the small-vehicle segment of the U.S. market. In addition, sales of "upscale" imported sport-utility vehicles increased considerably. In contrast, sales of imported pickup trucks have virtually ceased, as foreign manufacturers have shifted production from overseas plants to plants in North America.

Sales of "other" trucks increased 20.0 percent to 0.6 million units after increasing 22.1 percent. The domestic share of "other" truck sales was 95.1 percent. Annual sales of "other" trucks have more than doubled since the current economic expansion began in 1991. Demand for heavy trucks has been high in recent years, partly because of the growth in spending on durable goods; these trucks are used extensively to transport goods—such as computers, machine tools, motor vehicles, and appliances—and parts for these goods. In addition, the increase in the use of "just-in-time" assembly practices has required manufacturers to ship parts more frequently.



By quarter, new-truck sales increased in the first, second, and third quarters of 1999 and decreased in the fourth (chart 6).